

P.O. Box 490 Lowell, OR 97452 Phone: 541-937-2157

www.lowelloregon.gov/cd/page/planning

HILLSIDE DEVELOPMENT PERMIT APPLICATION

Project name:	Date:	_
Site address:	5.	
Owner's name		
Mailing address		
Telephone	Email	
Surveyor/Engineer/or Architect		
Company		
Address		
Telenhone	Email	

Instructions for Applicants:

You are required to submit this hillside development permit with a building permit application if you intend to develop any area within the City where the slope of the land is 15 percent or greater. While not required, we encourage you to consult with an Oregon licensed Certified Engineering Geologist or Geotechnical Engineer when completing this form. The responses and supporting documents you provide will be the basis for determining whether your application satisfies the hillside development standards in the Lowell Revised Code Sec. 9.630.

REQUIRED DOCUMENTS TO BE SUBMITTED WITH THIS PERMIT APPLICATION (L.R.C. 9.634)

Ple	ase submit the documents below with this hillside development permit application.
	<u>Surveyor's report.</u> A scale drawing of the property prepared by a licensed surveyor, showing existing topography at two-foot contour intervals, watercourses both permanent and intermittent, and natural physical features such as rock outcroppings, springs and wetlands. This information is in addition to required development site plan submittal requirements.
	Soils and geology report. This report shall be prepared by a suitably experienced and qualified licensed engineering geologist or geotechnical engineer, and shall include the following for areas to be developed having 15 percent or greater:(1)Data regarding the subsurface condition of the site such as the nature, depth and strength of existing soils, depth to bedrock, location of soft soils, hard stratum, potential slip planes, geological weak zones, clay seams or layers, unconsolidated deposits, and previous grading activities. The report shall also address existing water tables, springs, watercourses and drainage patterns, seismic considerations, and any offsite geologic features or conditions that could impact or be impacted by onsite development.(2)Conclusions and recommendations regarding the stability of underlying slopes and of proposed cuts and fills, any remedial or preventative actions that are required, any limitations upon the use of the site, grading procedures, requirements for vegetation preservation and revegetation, special coverings or treatments for areas that cannot be readily revegetated, erosion control methods, drainage systems, setbacks from slopes or other geologic features, foundation and building design, and backfills.
	<u>Blueprints.</u> Detailed plans shall be prepared for all proposed development on the lot. These plans shall become part of the working drawings dept on the jobsite, shall be based upon the findings of the required soils and geology report.
	Grading plan. A grading plan of the property, drawn to scale, showing existing and proposed finished grades at two-foot contour intervals, retaining walls or other slope stabilization measures, cuts and fills, and all other proposed changes to the natural grade. Include cross-sectional diagrams of typical cuts and fills, drawn to scale and indicating depth, extent and approximate volume, and indicating whether and to what extent there will be a net increase or loss of soil.
	<u>Drainage plan.</u> Detailed plans for collecting on-site drainage including the locations of all proposed surface and subsurface drainage devices, roof drains, foundation drains, catch basins and area drains showing clearly where and how they discharge into the public storm drainage system shall be provided. The direction of surface stormwater flows shall be indicated with arrows.
	Erosion control plan. Descriptions and/or drawings of proposed changes to soils and/or existing vegetation on the site; specific methods proposed to restore disturbed topsoil, minimize the

	identified potential erosion problems, and revegetate areas which will be stripped of existing vegetation; and a schedule showing when each stage of the project will be started and completed, including the total area of soil surface which is to be disturbed during each stage and the length of time soils will be left exposed.
	<u>Elevations.</u> Elevation views of all four sides of proposed structures shall be prepared which clearly show the existing and proposed grades, across the entire length of the structure all the way to the property lines on each side.
	<u>Trees.</u> Location of any trees to be retained and the location of protective fencing to be installed prior to construction shall be shown.
	<u>Special inspections.</u> If any special soils or foundation inspections are required, this shall be noted on the plans.
	Affidavit. The authoring engineer shall include a statement that the plans are consistent with the soils and geology report required by this section, with standards of section 9.632 and with any conditions of approval for the underlying development.
HII	LLSIDE DEVELOPMENT STANDARDS (L.R.C. 9.632)
sta	the spaces below, please describe how your project meets the following hillside development ndards. Use additional sheets of paper, if necessary. If a standard is not applicable to your project, ter "N/A" in the box.
1.	General grading. Any grading performed within the boundaries of a hillside development shall be kept to a minimum and shall take into account the environmental characteristics of that property, including but not limited to prominent geological features, existing streambeds, drainage ways, and vegetative cover.

2.	Slope stability. Potential slope instability problems such as slip planes, clay layers and dome-shaped bedrock shall be identified. Mitigation measures sufficient to render these areas safe for structures and infrastructure development shall be applied.
3.	Building sites. Building sites shall be designed to minimize the need to alter the natural grade during construction of individual buildings. Mass pad grading or continuous terracing of building sites is not allowed. Lot development plans must demonstrate that the lot is large enough to safely accommodate both the planned structure(s) and the needed cuts and/or fills.
4.	Retaining walls. Especially on cutbanks, retaining structures are preferred in lieu of larger excavations to minimize the amount of disturbed area. Retaining walls over four feet high shall be engineered. Smaller walls shall be constructed in conformance with the soils and geology report recommendations and the engineer's plans. Designs for retaining structures shall give consideration to aesthetics and shall use mitigations such as terracing and/or landscaping plants to reduce the structures' apparent height and mass.
_	Cut and fill standards. All out and fill slangs generally must not exceed a true (harizontal) to one

5. Cut and fill standards. All cut and fill slopes generally must not exceed a two (horizontal) to one (vertical) ratio. Cuts and fills shall be designed to avoid movement or episodic erosion during heavy rains or earthquakes, mechanical overloading of underlying soils and undercutting of adjacent areas. Fills shall be benched as required to provide a proper bond with the existing terrain. Unless proven otherwise by specific soils information to the contrary, cuts shall be

	presumed to be incapable of revegetation without special treatments, such as importation and retention of topsoil. Plans must be submitted for all cuts in excess of two feet deep, showing either a covering for the cut, such as stonework, or a revegetation plan that does not rely on the ability of the exposed subsoil to support plant growth.
6.	Revegetation. Earthwork shall be designed so that all disturbed areas will be restored to have at least six inch of topsoil. Revegetation of projects exposing soil shall be aggressively pursued so that bare ground will not be unnecessarily exposed to the weather between November 1 and May 30. Construction schedules shall be drawn up to limit the period of time that soil is exposed and unprotected. The existing vegetative ground cover should not be destroyed, removed, or disturbed more than 15 days prior to grading or construction of required improvements. Soil exposed during the removal or significant disturbance of ground cover vegetation shall be built upon (i.e. covered with gravel, a slab, foundation or other construction), landscaped (i.e. seeded or planted with ground cover) or otherwise protected within 15 days of grading or other predevelopment activity. Provided, however, that these restrictions do not apply during the months of June, July, August and September.
7.	Modification of public street standards. Street width, grade and alignment, right-of-way width, and sidewalks in hillside areas shall be designed to minimize changes to existing topography and provide adequate access to adjacent properties. Cuts and fills in excess of four feet deep shall be considered significant and should be avoided where feasible.

8.	
	contained in section 9.520, hillside storm drainage systems shall be designed to:(1)Protect cuts,
	fills, roadways, retaining walls and structures from saturation, slope failure and settling.(2)To
	anticipate and mitigate the rapid movement of debris into catch basins, and storm water flows
	bypassing catch basins.(3)Insure that concentrated storm water is disposed of in a controlled manner does not create significant erosion or adverse effects on downhill properties.
	mainter does not create significant erosion of adverse effects on downlin properties.
0	Decreased in a factor and existing constant in the standard should be described as a second short and de-
9.	Preservation of trees and existing vegetation. Construction shall be done in a manner that avoids unnecessary disruption to vegetation and trees. Temporary protective fencing shall be
	established around all trees designated for protection prior to the commencement of grading or
	other soil disturbance. Grade changes and trenching shall not be made within five feet of the
	dripline of such trees without written concurrence from an arborist that such changes will not
	cause permanent damage to the tree.
	OFFICE USE ONLY:
	Date received: Case number: Fee paid: